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Application No. 10/544093  
Amendment dated July 22, 2010  
Reply to Office Action of January 22, 2010

PATENT

**Amendments to the Claims:**

Please amend claims 106 and 121. This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-102. (Canceled)

103. (Previously Presented) A fragment of amyloid- $\beta$  ( $A\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), wherein the fragment is linked to a carrier molecule to form a conjugate which helps elicit an immune response against the fragment.

104. (Canceled)

105. (Previously Presented) The fragment of claim 103, wherein multiple copies of the fragment are linked to a single copy of the carrier.

106. (Currently Amended) The fragment of claim 103, wherein a single copy of the fragment is linked to multiple copies of the carrier.

107. (Previously Presented) The fragment of claim 103, wherein the fragment is linked to the carrier through a spacer.

108. (Previously Presented) The fragment of claim 103, wherein the fragment is linked to the carrier by chemical crosslinking.

109. (Previously Presented) The fragment of claim 103, wherein the carrier is a heterologous polypeptide.

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110. (Previously Presented) The fragment of claim 109, wherein the heterologous polypeptide comprises the amino acid sequence QYIKANSKFIGITEL (SEQ ID NO:8).

111. (Previously Presented) The fragment of claim 109, wherein the heterologous polypeptide comprises the amino acid sequence AKXVAAWTLKAAA (SEQ ID NO:11).

112. (Previously Presented) The fragment of claim 103, wherein the carrier is a diphtheria toxoid.

113. (Previously Presented) The fragment of claim 103, further comprising a pharmaceutically acceptable vehicle.

114-117. (Canceled)

118. (Previously Presented) A pharmaceutical composition comprising a fragment of amyloid- $\beta$  ( $A\beta$ ), the amino acid sequence of which consists of KL.VFFAED (residues 16-23 of SEQ ID NO:1) and a pharmaceutically acceptable vehicle, wherein the fragment is linked to a carrier molecule to form a conjugate which helps elicit an immune response against the fragment.

119. (Canceled)

120. (Previously Presented) The composition of claim 118, wherein multiple copies of the fragment are linked to a single copy of the carrier.

121. (Currently Amended) The composition of claim 118, wherein a single copy of the fragment are is linked to multiple copies of the carrier.

122. (Previously Presented) The composition of claim 118, wherein the fragment is linked to the carrier through a spacer.

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123. (Previously Presented) The composition of claim 118, wherein the fragment is linked to the carrier by chemical crosslinking.

124. (Previously Presented) The composition of claim 118, wherein the carrier is a heterologous polypeptide.

125. (Previously Presented) The composition of claim 124, wherein the heterologous polypeptide comprises the amino acid sequence QYIKANSKFIGITEL (SEQ ID NO:8).

126. (Previously Presented) The composition of claim 124, wherein the heterologous polypeptide comprises the amino acid sequence AKXVAAWTLKAAA (SEQ ID NO:11).

127. (Previously Presented) The composition of claim 118, wherein the carrier is a diphtheria toxoid.

128. (Withdrawn) The composition of claim 118, further comprising an N-terminal A $\beta$  fragment.

129. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is A $\beta$ 1-5.

130. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is A $\beta$ 1-6.

131. (Withdrawn) The composition of claim 128, wherein the N-terminal fragment is A $\beta$ 1-7.

132. (Previously Presented) The composition of claim 118, further comprising an adjuvant.

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133. (Previously Presented) The composition of claim 132, wherein the adjuvant is alum.

134. (Previously Presented) The composition of claim 132, wherein the adjuvant is MPL.

135. (Previously Presented) The composition of claim 132, wherein the adjuvant is QS-21.

136. (Previously Presented) The composition of claim 132, wherein the adjuvant is RC-529.

137. (Previously Presented) The composition of claim 118, further comprising a surfactant.

138. (Previously Presented) A vial comprising a pharmaceutical composition comprising a fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists KLVFFAED (residues 16-23 of SEQ ID NO:1) in a pharmaceutically acceptable vehicle, and an adjuvant.

139. (Withdrawn) A method of prophylaxis of a disease associated with amyloid deposits of A $\beta$  in the brain of a patient susceptible to the disease, comprising administering to the patient an effective regime of a fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), and thereby effect prophylaxis of the disease.

140. (Withdrawn) A method of treating a disease associated with amyloid deposits of A $\beta$  in the brain of a patient susceptible to the disease, comprising administering to the patient an effective regime of fragment of amyloid- $\beta$  (A $\beta$ ), the amino acid sequence of which consists of KLVFFAED (residues 16-23 of SEQ ID NO:1), and thereby treat the disease.